

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-20 (cancelled)

21. (new) A system for an internal combustion engine of a vehicle, said engine having at least a first and second group of cylinders, said system comprising:

    a first emission control device coupled exclusively to said first group of cylinders;

    a second emission control device coupled exclusively to said second group of cylinders;

    a third emission control device coupled downstream of both said first and second emission control devices;

    a controller for operating in a first mode with both cylinder groups combusting air and injected fuel, the engine producing a first range of engine output during said operation in said first mode; and operating in a second mode with said first cylinder group combusting air and injected fuel and said second cylinder group pumping air without injected fuel, with the engine producing a second range of engine output, with at least a portion of said second range being at a lower output than a lower end of said first range.

22. (new) The system of claim 21 where said second mode is carried out during a deceleration condition of the vehicle.

23. (new) The system of claim 22 where said first and second emission control devices are three way catalysts.

24. (new) The system of claim 23 further comprising an electronically controlled throttle plate.

25. (new) The system of claim 24 wherein said controller further adjusts position of said electronically controlled throttle plate to control engine airflow.

26. (new) The system of claim 21 wherein said engine output is an engine torque output.

27. (new) The system of claim 21 where said second mode includes operation in a region where an air amount that would be required if both cylinder groups were combusting would be less than an engine misfire air limit.

28. (new) A system for an internal combustion engine of a vehicle, said engine having at least a first and second group of cylinders, said system comprising:

an emission control device coupled to both said first and second group of cylinders, said device including a NOx trap;

a controller for operating in a first mode with both cylinder groups combusting air and injected fuel, the engine producing a first range of engine torque output during said operation in said first mode; and operating in a second mode

with said first cylinder group combusting air and injected fuel and said second cylinder group pumping air without injected fuel, with the engine producing a second range of engine torque output, with at least a portion of said second torque range being at a lower torque output than a lower end of said first torque range, said second mode being carried out at least during a deceleration condition of the vehicle.

29. (new) The system of claim 28 further comprising a fuel injector for directly injecting fuel into the engine.

30. (new) The system of claim 28 further comprising an electronically controlled throttle plate.

31. (new) The system of claim 30 wherein said controller further adjusts position of said electronically controlled throttle plate to control engine airflow.

32. (new) The system of claim 28 wherein said engine output is an engine torque output.

33. (new) The system of claim 28 where said second mode includes operation in a region where an air amount that would be required if both cylinder groups were combusting would be less than an engine misfire air limit.